RW-470

Technical Manual

Final Version

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The proper names of the Windows operating systems are as follows:

Microsoft® Windows® 95 operating system

Microsoft® Windows® 98 operating system

Microsoft® Windows® Millennium Edition

Microsoft® Windows® 2000 Professional

Microsoft® Windows® 2000 Server

Microsoft® Windows NT® Server operating system Version 4.0

Microsoft® Windows NT® Workstation operating system Version 4.0

Note:

“RW-470 PS” stands for RW-470 Postscript Level 3 Compatible Option

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Technical Manual

This technical manual explains some problem solutions, provides you with technical data and background information for the RW-470 plot management system programs.

We wish you every success in working with the RW-470 programs.

Package list

The delivery includes

- Installation sheet,
- the RW-470 Controller,
- one CD with Software and PDF-Manuals,
- one 3,5 inch-disc with RSP-License files.

System requirements

Please read through the following recommendations carefully. They can be very helpful in finding the optimum hardware for your needs.

- **Operating system**:
  Microsoft Windows 2000 Professional with ServicePack 1 or higher
- **Processor**:
  Pentium III, 800 Mhz or higher.
- **PCI Bus:**
  The PCI bus system must meet up-to-date standards (PCI 2.0 or higher – 3.3 V or 5 V autoadaptive, maximum load 5 A). If your computer does not fulfill this standard, it is possible that the plotter controller will not be identified.
- **Front Side Bus:**
  133 Mhz
- **System memory**:
  Use a system memory with at least 256 MB RAM. With this system memory, you can plot or scan the maximum drawing size. However, a system memory of 512 MB RAM is recommended if you wish to simultaneously plot and scan drawings with maximum drawing size. Simultaneous scanning and plotting of smaller formats also enables the use of smaller system memory. See also page 6.
- **Hard drive**:
  The hard drive should have at least 10 GB memory. We recommend not to install the program on that drive where you have already installed your operating system.
- **Network interface/Configuration**:
  10/100 Base T Ethernet, the TCP/IP configuration is necessary
- **RW-470 Controller:**
  Physical dimension: 190 mm x 128 mm
  PCB dimension: 174,63 mm x 106,8 mm

- **Monitor:**
  At least 1024 x 768 pixels resolution

Memory requirements

In the following chart the possible sizes of plots were calculated. The sizes of plots depend on the size of the main memory. In the first chart you can see the results for documents with an average complexity and in the second the results for documents with high complexity.
Further assumption are:

- All calculations are based on a transportation speed of 90 mm/s.
- Scan and plot degree is 1 bit/pixel
- Usage of average document complexity.
- Usage of 128 MB for operating system Windows 2000 and related drivers.

PC memory in MB	Estimated with compression (average)		
	Scan only	Plot only	simultaneous
256	6.0 (7.250)	6.0 (7.250)	3.625
512	6.0 (21.981)	6.0 (21.981)	6.0 (10.991)
768	6.0 (36.712)	6.0 (36.712)	6.0 (18.356)
(1 GB) 1024	6.0 (51.443)	6.0 (51.443)	6.0 (25.721)
(1.5 GB)1536	6.0 (80.904)	6.0 (80.904)	6.0 (40.452)

PC memory in MB	Guaranteed (worst case)		
	Scan only	Plot only	simultaneous
256	2.072	2.072	1.036
512	6.0 (6.280)	6.0 (6.280)	3.140
768	6.0 (10.489)	6.0 (10.489)	5.245
(1 GB) 1024	6.0 (14.698)	6.0 (14.698)	6.0 (7.349)
(1.5 GB)1536	6.0 (23.116)	6.0 (23.116)	6.0 (11.558)

Printer Controller RW-470

The RW-470 Software works only, if you have installed an controller. You have to install the Printer Controller RW-470 and the appropriate software. In the next chart the technical data are listed. In the following chapter the installation of the kernel driver is explained.

Technical Data

Item	**Specification**
PCI style	PCI Version 2.0, Busmaster
Bus-Width	32 Bit
max. PCI bus clock	33 MHz
physical dimension	190 mm x 128 mm
PCB dimension	174,63 mm x 106,8 mm
power supply	3.3 Volts
max power consumption	type. 7.5 W, max. 15 W
max memory on board	96 MB
Connection to copier	Ricoh IF-cable
max. cable length	5 m
fault tolerance	by software shutdown
onboard processor	logic cell Spartan LCA
copier interface	according Ricoh APIP
PC resources	1 x IRQ, I/O range, 2 x memory window 32 MB
scanning	binary data
plotting	binary data
max pix per line	21600 pixels
scan and plot resolution	600 dpi
max scan length	6000 mm
max plot length	6000 mm
plotting speed	90 mm/sec
OS	Win 2000 Professional
rasterization process	3 step pipeline mode yield full engine speed
EMI	fcc 47 part 15

Changes to the Controller RW-470 are possible and the manufacturer does provide separate information of them.

The technical specifications comply with CE

Installing the Controller into your PC

Note: The Printer Controller RW-470 is – like all other high integrated circuits – sensitive to electrostatic charge. Therefore, remove the controller carefully from the shipping container and do only touch it at the side or at the bracket. Do never touch any of the circuits on the controller with your finger. If you need to do so, touch a metal object before you touch the controller.

1. Switch off your PC before you install the controller.
2. Select a free PCI slot according specification above. Note that on certain computers the PCI slot #5 is not fully compatible to PCI specification 2.0. In that case do not use slot #5 and #6.
3. Insert the controller into the PCI slot and fasten the fixing screw. Make sure the controller is sitting well, no components touch surrounding cards or the case and that the fixing screw is set properly.
4. Re-mount the PC case. Connect the cable(s) to the plotter.

Troubleshooting

The kernel driver will only run, if an controller board was found and all self checks were passed successfully. To see, whether the kernel driver is running: Run ControlPanel->Devices and check whether the device „PRINTER CONTROLLER RW-470Drv“ is running.

If the kernel driver (device driver) „Printer Controller RW-470Drv“ is not running: Start event-viewer START->Programs->Administration->Eventviewer and find out reason for failure.
Only if the PRINTER CONTROLLER RW-470DRV Driver is running, you can use the controller.

Frequently asked questions

This chapter contains an overview of which commonly asked questions can arise when working with RW-470 PLOTBASE and how you can solve them. See also the explanations about "error messages" in the RW-470 PLOTBASE manual.
The topics are arranged in groups under terms, which are sorted alphabetically:

- **Jobs are not printed, indication „Please wait" in the status window**
  On the display of the plotter the interrupt button was activated. The plotter is in the offline mode and can't receive jobs from RW-470 PLOTBASE. If you want to recreate the online mode, press the interrupt button.

- **A file has not been included in the job list**
  1. Check the status bar, to see whether the interpreter is switched on. If this is not the case, you can activate it in the "Configuration" menu.
  2. Check whether the correct spool path is set in RW-470 CLIENTS.

- **A file has not been plotted, the job status in the job list displays a "Problem" (Color red)**
  The reasons could be due to the following errors:

  1. General errors:
     a. Check the messages in the RW-470 PLOTBASE status window. The plotter must display the status "Pending".
     b. Ensure that the play button is activated:

     c. If you want to work in automatic print mode, ensure that the "Auto Plot" mode is activated.

d. Carry out a "Test plot", to check correct function of the plotter. For that select "Job – Test Print".
e. Check whether the "Interrupt" switch at the scanner display has been activated. Deactivate it.
f. Check the connection cable between the scanner and server.

2. File error
   a. If a file certain file type (PDF, CGM, or similar.) cannot be printed, you must first acquire the relevant licenses for these optional file formats and install a license file.
   b. The file is possibly damaged. Send the file to RW-470 PLOTBASE again or transfer the file to the server in another file format.
   c. A printed stamp is defined larger than the drawing format.

3. Others
   a. Check whether the required type of media is available.
   b. Check the width of the available plotter rolls.

- **A file has not been plotted, the job in the job list has the status "manual" (Color light blue)**

  The following reasons are possible:

  1. The job is password protected.
     The printout can only be started manually by the user after a password has been entered.
  2. Test print is activated
     The printout has to be started manually, so that a test print out can be plotted first.

- **Color drawings**
  Colors are represented in RW-470 PLOTBASE by a raster density. You can set the "colors" in two different ways. Open the "Additional" tab in the job editor and click on the „Pen Settings" button, if the entry is a HPGL/2 or Calcomp format. Here you can set each individual color for the respective for-

format. Either you enter the gray scale for each individual color in percent or you set pens the pens to "Gray" and enter the required percentage value.

- **Lines are not visible**

If the file to be plotted is in a HPGL or Calcomp format, the color can be set too light or the pen widths are too small.

- **Printout plotted on an unexpected medium**

The plotter can sometimes print on another roll that you expected, although you entered the default values correctly. This can be caused by the following:

1. RW-470 PLOTBASE has a plot logic, which is instructed to „waste" as little paper as possible when selecting the roll, to print as quickly as possible (preferred print direction in landscape format).
2. As the roll sizes in RW-470 PLOTBASE must be fixed without variances, it is necessary to print on a larger roll even if a drawing is only 0.1 mm larger than the roll selected by you. This can e.g. be the case if unfavorable pen widths or scaling have been selected. There are three possible ways to solve the problem:
   a) Scale the drawing to e.g. 99 %,
   b) Increase the setting for the number of "step sizes/cm": e.g. from 400 to 401. The drawing would be reduced to 99.75 %.
   c) Use a thinner pen width for the drawing frame.

- **Quality loss**

Especially in photos and drawings with lots of gray scales, scaling can lead to a loss of quality. This is because the CIS element [Contact Image Sensor] in the scanner only divides all gray scale values into black and white due to the black-white threshold value and gray scale values can therefore not be scales with the drawing.

- **Scaling**

The following points must always be borne in mind when scaling drawings:

1. Photos and drawings can result in a loss of quality. C.f. Quality loss.

2. Note the minimum pen widths when scaling. C.f. Pen widths.

- **Pen widths**
  Ensure that you observe the minimum pen widths for vector images. Scaling a drawing smaller and scaling the pen widths too can lead to loss quality and information in the printout.

Overview of the file formats

In the following chart all file formats are listed. The standard formats are listed in the first chart and the optional formats are listed in the second chart. In the column „Read" you can see, which file format can be opened and read. In column „Write" you can get the information which file formats can be created after scanning or editing and which not.

Format	Related documentation	color depth	compression	Read	Write	remark
TIFF	„Tagged image file format – TIFF, Revision 6.0", Adobe Developers Association	b/w	uncompressed	yes	yes	
			CCITT/ 3 1D			
			FAX CCITT G3			
			FAX CCITT G4			
			PackBits			
BMP	Windows/OS/2 Bitmap format	b/w	uncompressed	yes	yes	size limits apply
PCX	„PCX format, version 2.x-5.x", ZSoft Paintbrush	b/w	uncompressed	yes	yes	size limits apply
			RLE run-length coded			
T6X	„The T6X file format", Ratio Entwicklungen GmbH	b/w	FAX CCITT G4	yes	yes	
RLC	no formal reference – different market standards	b/w	RLE run-length coded	yes	yes	16 bit size limits

CALS	DODISS, Department of Defense Index of Specifications and Standards					
	MIL-STD-1840B	b/w	FAX CCITT G4	yes	yes	
	MIL-STD-28002A	b/w	FAX CCITT G4	yes	yes	
CIT	„SDN 84-007 / Version 3.2.0“, Intergraph Corporation	b/w	FAX CCITT Group 4	yes	yes	
		b/w	FAX CCITT Tiled-Group 4	yes	yes	
HPGL, HPGL/2	„The HPGL and HPGL/2 command set“, Hewlett Packard	256 pens Palette Color 8 bit	as specified in reference	yes	no	
HP-RTL	„HP-RTL, Raster Transfer Language“, Hewlett Packard	b/w 1 bit	HP-RTL	yes	yes	
		grey 4 bit	HP-RTL	yes	no	
		Palette color 8	HP-RTL	yes	no	
		RGB 24	HP-RTL	yes	no	
Calcomp	„Calcomp 906/907 controller“, Calcomp	16 pens b/w	Calcomp	yes	no	
WMF	Windows Metafile, Microsoft			Yes	no	

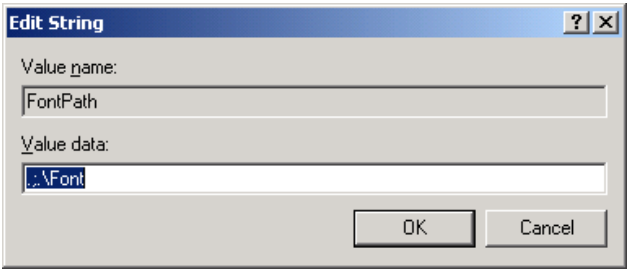
The following file formats are optional. You can use the DWG format only, if you have installed an AutoCAD program on your PC.

DWG	Autodesc	tbd		yes	no	
RW-470PS	"RW-470PS Level III Compatible Option"	b/w	PS, EPS	yes	no	
		Palette color 4	PS, EPS			
		Gray 4	PS, EPS			
		Gray 8	PS, EPS			
		Palette color 8	PS, EPS			
		RBG 24	PS, EPS			
CGM	„NIST CGM ATA, Release **2.0**", National Institute of Standards and Technology, Gaithersburg, MD 20899	b/w	CGM	Yes	No	Reference: „Interpreter Test Specification, Reference Pictures", National Institute of Standards and Technology
		Palette color 8	CGM			
		RGB 24	CGM			

Additional font paths

To enter additional font paths and thus additional fonts proceed (if you are the administrator) as follows:

1. Open the registry editor. Select the following file:
   \\HKEY_LOCAL_MACHINE\SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\RW-470PS / EPS\
   FontPath
   Open an edit dialog by double clicking on the file name.



2. The existing entry ".;.\Font" of the above figure is based on the following syntax rules:
   - . (Full stop): the font path is in the current folder
   - ; (Semicolon): begins a new font path
   - .\ (Full stop, back slash): the font path is in the subfolder .\<subfolder>

   The existing entry ".;.\Fonts" means that the actual font is located in the current folder (RW-470PS / Eps) or in the "Fonts" subfolder of the current folder.

Now enter a new font path in the "Value" field behind the existing font path. Define additional fonts using the syntax described above.

Producing SSL files

The structure and commands of the SSL files are described in this chapter. You can use the SSL commands to configure the print job yourself. There are three classes of SSL commands: Structured commands, SSL commands and parameters.
This description explains the structured commands first, there then follows an alphabetical list of the SSL commands with the corresponding parameters.

Structured commands

A job begins with BeginJob <name> and ends with EndJob. The defaults for the plot files are defined immediately below BeginJob, and are based on commands related to the set and plot file. The block with commands for the plot file starts with BeginOutput and ends with EndOutput.

Structured command:	**Syntax:**	**Example:**
BeginJob	BeginJob <name>	BeginJob Project 6
EndJob	EndJob	-
BeginOutput	BeginOutput	-
EndOutput	EndOutput	-

Example 1:

```
BeginJob Project 6
    Comment: EntryA
    BeginOutput
        OutputSize A4
        Name “file2.plt“
        Directory “C:\spool\ssl\Project 6“
    EndOutput
    Comment: EntryB
    BeginOutput
        OutputSize A2
        Copies 2
        Name “file3.plt“
        Directory “C:\spool\ssl\Floorplan 3“
```

```
    EndOutput
EndJob
```

Example 2:

```
BeginJob            Floorplan
Copyright           "1998 Schmidt"
CreationAppl        "BSP R1.01"

Comment             Job Settings
JobName             "TEST_1"
UserName            "ROS"
Account             "MAGIC"
Notes               "TEST EXAMPLE"
Distribution        "TO: KSC, JGE "
Copies              2
JobCollate          on
JobFlagSheet        Job
...

; Input Defaults
OrigDirectory       "C:\\TEST"
HpglPens            off
FileEmulation       auto
....

; Output Defaults
Stamp               text "COMPANY STAMP"
+                   position bottomleft coordinate 100 100
Zoom                100. 100.
Rotate              270
...

BeginOutput
Stamp               off
Zoom                100. 100.
Rotate              auto
MediaType           paper
Name                "PLOT.000"
EndOutput
```

```
BeginOutput
...
Stamp                off
Name                 "PLOT.001"
...

EndOutput

EndJob
```

SSL commands

For each SSL command you will find descriptions, which are labeled with the abbreviations SC, C, SY, D. They mean the following:

- SC (Scope): This describes where the command can be placed. JOB is in the area between *BeginJob* and the first *BeginOutput*. Here there are commands, which always affect a set as a whole, e.g. *Customer* or *e-mail*, and the defaults for the SSL commands, which concern the entries. For some SSL commands there are no meaningful defaults, e.g. Name, these are only in the ENTRY area. The ENTRY area is located between a *BeginOutput* and the corresponding *EndOutput*. This is where the commands are, which exactly concern a plot file, namely those, which are clearly labeled with *Name* and *Directory*. A command in this area has the highest priority, it overlays other instructions from the defaults area (JOB). If a command is not listed here, the corresponding entry from the JOB applies.
- C (comment): This contains a description of the meaning of the command as well as the range limitations, which do not result from the syntax.
- SY (Syntax): This is where the command syntax is written in the form of an EBNF (Extended Backus-Naur Form).
  Notes on EBNF:
  - A production is represented by =.
  - An exclusive Or by |
  - Nonterminal symbols are labeled with pointed brackets: <String>

- Any number of symbols (including none) by round brackets with asterisk: (<Digit>)*
- More than one symbol with round brackets with Plus : (<Digit>)+
- One or no symbols with round brackets with question mark: (<Whitespace>)?

A normal arithmetic bracket is also round: (a | b)

- D (Default): This is where the program defaults are if there is no SSL (and no default.ssl).

The SSL commands are listed in the following. There are three different types of SSL commands, which are labeled in different ways:

■ Currently supported commands
☺ commands, that you can edit
No mark: Commands, which are not supported in this product.

Account ■ ☺

SC = JOB

C = Any text, which is output in the account. Any alphanumeric string is valid.

SY = Account <string>

D = –

AddStrip

SC = JOB, ENTRY

C = replaced by → Margin top or → Margin bottom

SY = AddStrip <addstrip>
<addstrip> = leading <real> (<unit>) ? trailing <real> (<unit>)?

D = –

ArchiveReference ■

SC = JOB, ENTRY

C = any text, which is stored in the archive, to label the drawing. Any alphanumeric string is valid.

SY = **ArchiveReference** <string>

D = –

CalComp ■ ☺

SC = JOB, ENTRY

C = settings for Calcomp files

SY = CalComp (<calcomp>)+
<calcomp> = (filepensize (on | off)) | (penscale (on | off)) | (minwidth <real>) | (maxwidth <real>) | (stepsize <int>) | (patterntype (random | circle | ordereddither)) | (ignorepensize (on | off)) | (autodetect (on | off)) | (checksum (on | off)) | (doublesync (on | off)) | (eom <int>) | (sync <int>)

D = auto, auto, 800, auto, auto (not current)

CalcompColorEmulation ■

SC = JOB, ENTRY

C = Determines the corresponding gray scale values for the pen colours, only for CalcompPens from the SSL.

SY = CalcompColorEmulation (color <color> saturation <int>)+
<color> = black | white | green | red | yellow | blue | magenta | cyan | darkyellow |darkgreen | darkred | darkblue | darkmagenta | darkcyan | gray

D = –

CalcompPens ■ ☺

SC = JOB, ENTRY

C = Pen settings for Calcomp files

SY = CalcompPens (off | <custompen>)

<custompen> = (number (<int> | <int> - <int> | all) <pensettings>)+
<pensettings> = width <real> color <int> saturation <percent> (pattern <patterntype>)?
<patterntype> = circle | random

D = off

Comment or ';' ■ ☺

SC = JOB, ENTRY

C = any comment up to the end of the row is ignored and is lost when processed by the program. See also *Note*.

SY = Comment <any> or ; <any>

D = –

Confirmation

SC = JOB

C = When switched on, stops the processing after the first plot. Replaced by *TrialPrint*

SY = Confirmation (off | on)

D = off

Copies ■ ☺

SC = JOB, ENTRY

C = Number of copies, in JOB only default for the ENTRIES.

SY = Copies <int>

D = 1

Copyright ■

SC = JOB

C = Text, which identifies the Copyright. Can be used in the stamp.

SY = Copyright <string>

D = –

CostCenter ■

SC = JOB

C = Text, which identifies the account. Interesting for an accounting module.

SY = CostCenter <string>

D = –

CreationAppl ■

SC = JOB

C = Text, which identifies the generating applications.

SY = CreationAppl <string>

D = –

Customer ■ ☺

SC = JOB

C = Text, which identifies the job's customers.

SY = Customer <string>

D = –

CutMethod ■ ☺

SC = JOB, ENTRY

C = standard : Standard formats are cut.
synchro : The cuts match the plot.

SY = CutMethod (standard | synchro)

D = synchro

DeleteAfterPlot ■

SC = JOB

C = The whole job is deleted after plotting and does not remain in the history.

SY = DeleteAfterPlot (on | off)

D = off

Directory ■

SC = ENTRY

C = The directory, in which the plot file is, absolute paths are not currently possible, therefore, SSLs can not be simply copied with your image directories.

SY = Directory <string>

D = –

Distribution ■ ☺

SC = JOB

C = Distribution, which can be printed on the JobFlagSheet.

SY = Distribution <string>

D = –

EarliestPlotTime

SC = JOB

C = Earliest time at which the set is to be printed.

SY = EarliestPlotTime "YYYY:MM:DD:hh:mm"

D = –

E-Mail ■ ☺

SC = JOB

C = E-mail address to which a message is sent, when the plot job has been completed.

SY = Email (off | all <string>)

D = off

FileEmulation ■

SC = JOB, ENTRY

C = Gives the file format of the plot file, if auto, the plot software decides which format is available.

SY = FileEmulation (auto | CalComp | CALS | HPGL | HPGL2 | PCX | TIFF | RLC | MTF)

D = auto

HeaderPosition ■ ☺

SC = JOB, ENTRY

C = Gives where the drawing header is located. Important for folding, so that the header is visible on the top of the folded package

SY = HeaderPosition (ul | upperleft | ur | upperright | ll | lowerleft | lr | lowerright | unknown)

D = lr

Hpgl ■

SC = JOB, ENTRY

C = filepensize on: Pen sizes from the plot file; off: Pen widths from the ENTRY
filepencolor on: Pen colors from the plot file; off: Pen colors from the ENTRY
penscale on: Pen widths are scaled too; off: Pen widths are preserved
clipping on: Drawing size is taken from the file; off: Drawing size is calculated from the vectors
minwidth: minimum pen width after scaling (see penscale)
maxwidth: maximum pen widths after scaling (see penscale)
stepsize: Steps per centimeter
patterntype : Fill pattern for the gray implementation
ignorepensize on: Pen widths are ignored when calculating the sizes; off: Pen thicknesses are taken into consideration when calculating the sizes, can lead to changes in the plot size when changing the pen widths.
bicolorrgb: Only for two-color plotters, represents one color channel on the second page. 0 = red, 1 =

green, 2 = blue
dithermode: for HPGL / RTL

SY = Hpgl (<HpglStatement>)+

<HpglStatement> = (filepensize (on | off)) | (filepcolor (on | off)) | (penscale (on | off)) | (minwidth <real>) | (maxwidth <real>) | (stepsize <int>) | (patterntype (random | circle | loadablepattern | ordereddither)) | (ignorepensize (on | off)) | (bicolorrgb (0 | 1 | 2)) | (dithermode (ordereddither | errordiffusion))

D = filepensize on, filepencolor on, penscale off, minwidth 0 (mm), maxwidth 10 (mm), stepsize 400, patterntype loadablepattern, ignorepensize off, bicolorrgb 0, dithermode ordereddither

HpglColorEmulation ■

SC = JOB, ENTRY

C = Determines the gray scale values corresponding to the pen colours, only for HpglPens from the SSL.

SY = HpglColorEmulation (color <color> saturation <int> (page (0 | 1))?)+
<color> = see *CalcompColorEmulation*

D = –

HpglPens ■

SC = JOB, ENTRY

C = Pen settings HPGL Plots, saturation 0 -100 (white-black), pens 0 – 255. Are only effective, if *filepensize* and *filepencolor* in *Hpgl* are set to off.

SY = HpglPens (off | <custompen>)
<custompen> = see ***CalcompPens***

D = off

Invert ■ ☺

SC = JOB, ENTRY

C = inverts the plot

SY = Invert (on | off)

D = off

JobCollate ■ ☺

SC = JOB

C = on: Sorts the plots in sets (123123); off: Prints the same plots one after the other (112233) only effective if *SetCopies* > 1:

SY = JobCollate (on | off)

D = on

JobFlagsheet ■ ☺

SC = JOB

C = The flagsheet is an information sheet, which can be printed off for unsorted issue per set or for sorted issue per set copy. As a standard, it contains the stamp and the file names, further control commands are possible: job / set = One sheet per set / set copy; text = Free text with macros; header / trailer = in front of or behind the set; tray <int> = roll from which the info sheet is to be printed; size = paper size, if not given: A4; account = with *account* text; distribution = with *distribution* text, prg = a folding program, so that the flag sheet also lies on the folded stack of images.

SY = JobFlagsheet (off | <Infosize>)
<Infosize> = (job | set) (text <string>)? (header | trailer) tray <int> size <papersize> (account)? (distribution)? (prg <int>)?

D = off

JobName ■ ☺

SC = JOB

C = Name of the set (= File name without extension)

SY = JobName <string>

D = –

JobPlotter ■

SC = JOB

C = Controls the printout on a certain plotter, if several plotters are connected to the plot server (PLOTSERVER)

SY = JobPlotter (auto | <string>)

D = auto

JobPriority ■

SC = JOB

C = Priority of the jobs in the queue

SY = JobPriority (high | normal | low | wait | immediate)

D = normal

Margin ■ ☺

SC = JOB, ENTRY

C = Adds a white margin to the drawing.

SY = Margin (off | all <real> <unit> | (<margins>)+)
<margins> = (right <real> (<unit>)?) | (left <real> (<unit>)?) | (top <real> (<unit>)?) | (bottom <real> (<unit>)?)

D = off, values not given: 0.

MediaFeed ■

SC = JOB, ENTRY

C = Behavior if the desired paper format is not available: larger = on larger format; smaller = on smaller format; exact = printout only on the matching format; manual = the operator must insert the paper manually

SY = MediaFeed (larger | smaller | exact | manual)

D = exact

MediaPosition ■

SC = JOB, ENTRY

C = Position of the plot on the paper.

SY = **MediaPosition** (auto | <position>)
<position> = ul | upperleft | uc | uppercenter | ur | upper-right | lc | leftcenter | cc | centercenter | rc | rightcenter | bl | bottomleft | bc | bottomcenter | br | bottomright

D = ul

MediaType ■ ☺

SC = JOB, ENTRY

C = Medium, on which the plot is printed.

SY = MediaType ((bond | paper) | recycled paper | (vellum | transparent) | (film | polyester) | dontcare)

D = dontcare

Mirror ■ ☺

SC = JOB, ENTRY

C = Mirror about the x- or y-axis

SY = Mirror (off | x | y | xy)

D = off

Name ■ ☺

SC = ENTRY

C = Name of the plot file

SY = Name <string>

D = –

Notes ■ ☺

SC = JOB, ENTRY

C = Comment on job / Plot, is retained during processing

SY = Notes <string>

D = –

OnError

SC = JOB

C = Reaction to errors; abort = abort set and continue with the next set; continue = continue with the next entry; query = display message and hold the plot until operator intercedes.

SY = OnError (abort | continue | query)

D = continue

OperatorMode

SC = JOB

C = on: The plot software calls the operator when plotting the job.

SY = OperatorMode (on | off)

D = –

OrigDirectory ■

SC = ENTRY

C = Path, in which the original file is

SY = OrigDirectory <string>

D = –

OrigName ■

SC = ENTRY

C = Name of the original file

SY = OrigName <string>

D = –

OutputBin ■ ☺

This is for the Input tray.

SC = JOB, ENTRY

C = Roll to be plotted from.

SY = OutputBin (auto | manual | Bin <int>)

D = auto

OutputSize ■ ☺

SC = JOB, ENTRY

C = choice of the paper format.
window : customer-specific format, image is distorted.
proportional : customer-specific format, image proportions are retained.
auto: the zoom setting determines the size of the printout.

SY = OutputSize (auto | manual | <papersize> | <window> | <proportional>)

<papersize> = <DIN> | <ANSI> | <ARC>
<DIN> = (DIN)? (A | B | C)(0 | 1 | 2 | 3 | 4 | 5)
<ANSI> = ANSI (A | B | C | D | E)
<ARC> = ARC (A | B | C | D | E)
< window > = window <real> <real> (<unit>)?
<proportional> = proportional <real> <real> (<unit>)?

D = auto

OutputTray ■

SC = JOB

C = For plotters with two trays (front/ rear)
auto: If the set is to be folded, the whole set is sent to the folder side. If no folding, the set comes out of the face-down tray default: A default can be set at the plot server,

if e.g. only one tray is accessible.
front / rear: the specific output

SY = **OutputTray** (auto | default | front | rear)

D = auto

Pens

SC = JOB, ENTRY

C = now → *HpglPens*

Placement

SC = JOB, ENTRY

C = Position of the plot on the paper: in x and y co-ordinates, or as a simple position

SY = Placement (<real> <real> <unit> | <position>)
<position> = ul | upperleft | uc | uppercenter | ur | upper-right | lc | leftcenter | cc | centercenter | rc | rightcenter | bl | bottomleft | bc | bottomcenter | br | bottomright

D = ul

Profile

SC = JOB

C = Identifier for a profile

SY = Profile <string>

D = –

RemoveStrip

SC = JOB, ENTRY

C = Cut the image now → *Margin*

SY = RemoveStrip <removestrip>

<removestrip> = leading <real> (<unit>)? trailing <real> (<unit>)?

D = –

Rotate ■

SC = JOB, ENTRY

C = Rotate the image

SY = Rotate (auto | 0 | 90 | 180 | 270)

D = auto

SecurityPrint ■

This is for "Locked Print".

SC = JOB

C = The set remains in the queue and is not plotted, until a password is entered. After the password is entered the set is given the priority immediate and DeleteAfterPlot.
The set cannot be edited without a password.

SY = **SecurityPrint** (off | on | "<code>")

<code> = 32 Hex Digits == MD5SUM(<Password>)

D = off

SetCopies ■ ☺

SC = JOB

C = Number of set copies only in JOB.

SY = **SetCopies** <int>

D = 1

Stamp ■ ☺

SC = JOB, ENTRY

C = The plot is stamped with one or several defaults. Parameter: name : freely definable name of the stamp. text : The text, which is stamped on. position : Where the image is stamped. font, size, -attribute : Typeface, size and style. bmp : an image can also be stamped on.

Name and path of the image. bmporientation : where is the image with relation to the stamp text. bmpdistance : Distance between stamp text – stamp image. framesize : Thickness of the frame surrounding the stamp. frametextdistance : Distance of the frame from the text. mirror, rotate : Mirror and rotate (0 – 359°) the stamp. color : Gray scale value. overlay : type of cover if the stamp covers drawing contents. numbering : Start number for numbering the plots for *Copies* > 1.

SY = Stamp (off | <customstamp>)

<customstamp> = <stampid> (<stampoption>)*

<stampid> = name <string> text <string>

<stampoption> = (position <stpposition> (coordinate <real> <real>)?) | (font <systemfont>) | (fontsize <int>) | (fontattribute (normal | bold | italic | underline | strikeout)) | (bmp <string>) | (bmporientation <bmpposition>) | (bmpdistance <real> (<real>)?) | (framesize <real>) | (frametextdistance <real>) | (mirror (off | x | y | xy)) | (rotate <int>) | (color (black | darkgray | gray | lightgrey | level <percent>)) | (overlay (off | invert | transparent | opaque)) | (numbering (off | <int>))

<bmpposition> = ul | upperleft | uc | uppercenter | ur | upperright | lc | leftcenter | cc | centercenter | rc | rightcenter | bl | bottomleft | bc | bottomcenter | br | bottomright

<stpposition> = ul | upperleft | uc | uppercenter | ur | upperright | lu | leftupper | lc | leftcenter |
lb | leftbottom | cc | centercenter | ru | rightupper | rc | rightcenter | rb | rightbottom | bl | bottomleft | bc | bottomcenter | br | bottomright

D = off

TrialPrint ■

This is for “Sample Print”.

SC = JOB

C = The first copy of the set is plotted, then an operator input is waited for, to say whether the other copies are also to be printed.

SY = **TrialPrint** (on | off)

D = off

Units ■

SC = JOB

C = Unit of the job size information.

SY = Unit (cm | mm | inch | (points | pt | pixel))

D = mm

UserName ■ ☺

SC = JOB

C = User name to be able to assign the jobs.

SY = UserName <string>

D = –

Zoom ■ ☺

SC = JOB, ENTRY

C = Scaling factor. Determines the size of the drawing on the selected paper (*OutputSize*). auto : adjusts the drawing to the paper size. papersize : scales the drawing to a certain format. Two whole numbers scale the drawing in proportion to its original size.

SY = Zoom (auto auto | <papersize> | <float> <float>)

Producing CFG files

This chapter explains the CFG file structure and commands.
CFG files are usually produced normally automatically and are sent with the corresponding drawing files to the RW-470 PLOTBASE. They contain the settings for the print off.
You can use the CFG commands explained in this chapter to produce your own CFG file. To do this, you only need a simple text editor. Save the file when ready as <Filename>.cfg.
The CFG file and the drawing file must have the same name. Example files: tiger.cfg, tiger.tif. Copy this CFG file together with the drawing file in the spool directory (e.g. C:\spool\cfg) of the RW-470 PLOTBASE. Always send the CFG files first, then the drawing files. Otherwise there is a risk that the drawing file is automatically processed and plotted, before the actual print settings in the CFG file are available.

A CFG file could be constructed as follows:

```
COPYCOUNT =  1
ROTATE = 270
MIRROR = OFF
FOLD = OFF
BORDERACTIVE = ON
BORDERSAME = OFF
BORDERTOP = 5
BORDERBOTTOM = 5
BORDERLEFT = 20
BORDERRIGHT = 5
MEDIUM = PAPER
SCALEMODE = PERCENT
SCALEAUX1 = 10000
FILEPENS = ON
PEN001 = 0.25,BLACK
PEN002 = 0.35,BLACK
PEN003 = 0.5,BLACK
PEN004 = 0.7,BLACK
PEN005 = 0.1,BLACK
PEN006 = 0.5,GRAY,10
PEN007 = 0.5,GRAY,40
PEN008 = 0.5,GRAY,60
STEPSPERCM =  400
```

A CFG file contains the following entries:

ENTRY	VALUES	EXAMPLE	EXPLANATION
INPUTBIN	AUTO 1..n	AUTO	Input tray
CUT	ON OFF	ON	Cut immediately after the plot is finished (synchronous cut)
COPYCOUNT	1..999	1	Number of copies
ROTATE	AUTO 0 90 180 270	AUTO	Rotation of the document (anti-clockwise)
INVERT	ON OFF	OFF	Inverts the document
MIRROR	OFF X Y XY	OFF	Mirror the document about a certain axis
FOLD	OFF 1..xx	OFF	Folding program of the connected folder
SCALEMODE	ORIGINAL PERCENT FORMAT WINDOW	ORIGINAL	Scaling mode to be used
SCALEAUX1	ORIGINAL: not used PERCENT Percent times 100 FORMAT: DIN A0..DIN A6 WINDOW: Width in 1/1200 inches	-	Defines additional scaling details.
SCALEAUX2	WINDOW: Height in 1/1200 inches	-	Only used in "Window" scaling mode
MEDIUM	FILM TRANSPARENT PAPER DONT CARE	PAPER	
PRIORITY	NORMAL [HIGH] [LOW] [WAIT]	NORMAL	
ENTRY	**VALUES**	**EXAMPLE**	**EXPLANATION**
USER	...	JOHN	

		SMITH	
ORIGINALFILE	...	C:\DEMO\ LAND.PLT	
CALCOMP PEN01	Pen width of the pen 01 in 1/1000 mm	250	The resulting value must not exceed 32 pixels
CALCOMP PEN02..PEN16	0..32Pixel	250	as above
STEPSPERCM	1..9999	800	Steps per cm
CCCHECK	ON OFF	OFF	Check sum in Calcomp file
CCSYNC01	<Characters>	2	Calcomp: ASCII-Code of the first sync character
CCSYNC02	<Characters>	0	as above for second sync character
CCENDCHAR	<Characters>	3	Calcomp: ASCII-Code for end character
HPGL / HPGL2 PEN000	0..9.99 mm, <COLOR>	0.36,WHITE	Pen thicknesses in mm for HPGL pens Tip: HPGL pen numbers have three digits.
HPGL / HPGL2 PEN001	0..9.99 mm, <COLOR>	0.36,GRAY, 50	
HPGL / HPGL2 PEN002..PEN255	0..9.99 mm, <COLOR>	0.36,BLACK	as above
RED	BLACK WHITE GRAY	GRAY, 50	Red pins are printed off in certain colors
GREEN	dto	BLACK	as above
YELLOW	dto	BLACK	as above
BLUE	dto	BLACK	as above
MAGENTA	dto	BLACK	as above
CYAN	dto	BLACK	as above
DARKRED	dto	BLACK	as above
DARKGREEN	dto	BLACK	as above
DARKYELLOW	dto	BLACK	as above
DARKBLUE	dto	BLACK	as above
DARKMAGENTA	dto	BLACK	as above
DARKCYAN	dto	BLACK	as above
BORDERACTIVE	ON OFF	OFF	Activates border around the plot

ENTRY	**VALUES**	**EXAMPLE**	**EXPLANATION**
BORDERSAME	ON OFF	ON	All borders are the same as BorderTop

BORDERTOP	0..xxxx	0	Borders in mm
BORDERBOTTOM	0..xxxx	0	as above
BORDERLEFT	0..xxxx	0	as above
BORDERRIGHT	0..xxxx	0	as above

HPGL/2 commands and pens

In this chapter we have listed all the HPGL/2 commands that the program fully or partially supports:

+ = command is fully supported
~ = command is partially supported

- **Configuration and status group**:

DF = +
IN = +
IP = +
IR = +
IW = +
PG = +
RO = +
SC = +

- **Vector Group**:

AA = +
AR = +
AT = +
CI = +
PA = +
PD = +
PE = +
PR = +
PU = +
RT = +

- **Polygon Group**:

EA = +
EP = +
ER = +
EW = +
FP = +
PM = +
RA = +

RR = +
WG = +

- **Line and Fill Attributes Group**:

AC = +
FT = +
LA = ~
LT = +
PW = +
RF = +
SM = +
SP = +
UL = +
WU = +

- **Character Group**:

AD = ~
CP = +
DI = +
DR = +
DT = +
DV = +
ES = +
LB = +
LO = +
SA = +
SD = ~
SI = +
SL = +
SR = +
SS = +
TD = +

- **Technical Graphics Extensions**:

BP = +
CT = +
DL = +
MC = +
PS = +

- **Palette Extension**:

CR = +
NP = +
PC = +
SV = +
TR = +

- **Dual-Context Extension**:

No commands are supported

- **Digitizing Extension**:

No commands are supported

- **Default values for HPGL pens:**

All 256 HPGL pens have the pen thickness 0.35 mm as their default value.
They have the following default values as colors:

Pen	Color
0	white
1	black
2	red
3	green
4	yellow
5	blue
6	magenta
7	cyan
8-255	black

Calcomp commands and pens

In this chapter we have listed all the Calcomp commands and their implementation status in RW-470 PLOTBASE. The standard pen widths for the 16 Calcomp pens are given at the end of the chapter.

\+ = command is fully supported
– = command is not supported

- **951 Commands**:

paper cutter	–
top of form	–
async	–
start of plot	–
force plot	–
plot copies	+
plotter select	–
negate	–
pattern fill	–
hatch	–
setpat	–
setpen	+

- **Electrostatic Extensions**:

newpen	–
color sequence	–
extended pattern fill	–
area fill	black/white
color modify	–
extended setpen	–
xsetpen	black/white
extended setpat	–
diskIO	–
setlevel	–
newlevel	–
raster fill	–
pixel	–
plot status	–

- **Symbols Commands**:

font selection	+ [not all symbols]
symbol string count	+
plotter symbol scaling	+
controller symbol scaling	+
symbol characteristics	+
extended characters	+
select symbol set 0-4	+
plotting symbol from selected symbol set	+
user defined symbol	+
erase user symbol set	+

- **Circles Commands**:

chordal tolerance	+
circle command for circles	+
circle command for arcs	+

- **Dashlines Commands**:

dash bypass	+
dashline	+

- **Additional Commands**:

no operation	+
pass through 8 bits direct to plotter	
no operation	+
newplot	–
manual	–
pause	–
operator message	–
operator message with pause	–

- **Calcomp pen default values**:

Calcomp pens, currently 16 of them, have the following default values for the pen width:

Pen	Pen width in mm	Pen width in pixels
1	0.06	1
2	0.13	2
3	0.19	3

Pen	Pen width in mm	Pen width in pixels
4	0.25	4
5	0.32	5
6	0.38	6
7	0.44	7
8	0.51	8
9	0.57	9
10	0.64	10
11	0.70	11
12	0.76	12
13	0.83	13
14	0.89	14
15	0.95	15
16	1.02	16

Registry entries

In the registry editor you can alter several sub-trees for RW-470 PLOTBASE.
The following lists a selection of entries from the registry editor, which can be entered during the installation of RW-470 PLOTBASE and can then be changed by you. However, not all the entries have been listed, as either some of them should not be changed by you or they occur several times with respect to their meaning.

Key name: SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0

Name: AccountDelimiter
Type:REG_DWORD
Data:";"
[Comment: Separator in the accounting SDF file]

Name: AccountOn
Type:REG_DWORD
Data: 00000001
[Comment: Accounting on/ off]

Name: AccountSdfFile
Type:STRING
Data: C:\RW-470\PLOTBASE\PROGRAM\Account.sdf
[Comment: Path+Name Accounting SDF File]

Name: AccountTxtFile
Type:STRING
Data: C:\RW-470\PLOTBASE\PROGRAM\Account.txt
[Comment: Path+Name Accounting TXT File]

Name: AutoPlot
Type:REG_DWORD
Data: 00000000
[Comment: AutoPlot Mode on/ off]
Name: AutoRollChange

Type:REG_SZ
Data: 00000000
[Comment: 0: At the end of the roll only use identical roll, otherwise wait,1: At end of roll only use compatible roll, otherwise wait}]

Name: SpoolTimeout
Type:REG_DWORD
Data: 00000000
[Comment: Timeout for incomplete jobs in seconds]

Name: Dao
Type:STRING
Data: C:\RW-470\PLOTBASE\PROGRAM\CBDB.mdb
[Comment: Path + Name of the database used by the Plot-Server]

Name: Dynaset
Type:STRING
Data: SELECT ALL * FROM [T_PLOTBASE_job]
[Comment: An enquiry of the database (must not be altered)]

Name: DataPath
Type:STRING
Data: C:\RW-470\PLOTBASE\PROGRAM\Data
[Comment: Directory, in which the image files of the CFG jobs are stored]

Name: Path
Type:STRING
Data: C:\RW-470\PLOTBASE\PROGRAM
[Comment: Program directory]

Name: SslPath
Type:STRING
Data: C:\RW-470\PLOTBASE\SSL
[Comment: Directory, in which the SSL files of all jobs are stored]
Name: EnableQuotas
Type:REG_DWORD

Data: 00000000
[Comment: Percentage, how much HDD capacity can be used by the plot server]

Name: ErrorHandling
Type:REG_DWORD
Data: 00000000
[Comment: Strategy for errors that occur: 0: In case of error do not plot any further jobs,1: In case of error plot next jobs]

Name: JobHistoryDeleteCapacity
Type:REG_DWORD
Data: 00000001
[Comment: Percentage HDD capacity, if the given limiting value is exceed, jobs that have already been plotted are deleted until the value is less than the limiting value]

Name: JobHistoryDeleteDate
Type:REG_DWORD
Data: 3b00e979
[Comment: Delete jobs, which are older than the given date, internal system format for date output]

Name: JobHistoryDeleteJobCount
Type:REG_DWORD
Data: 0000000a
[Comment: Number of jobs, which can be listed in the history]

Name: JobHistoryOrganization
Type:REG_DWORD
Data: 00000000
[Comment: 0: JobHistoryDeleteJobCount is used, 1: JobHistoryDeleteCapacity is used, 2: JobHistoryDeleteDate is used]

Name: JobNumber
Type:REG_DWORD
Data: 00000712
[Comment: Next job number to be assigned, do not change because otherwise database errors can occur]

Name: LogFileName
Type:STRING
Data: %temp\\COPYBASELoggingPlot
[Comment: Path + Name of the log file, if switched on (for error detection)]

Name: Logging
Type:REG_DWORD
Data: 00000000
[Comment: logging on/ off]

Name: Server
Type:STRING
Data: RW-470 PLOTBASE - Server
[Comment: Name of the plot server]

Name: ServerExe
Type:STRING
Data: C:\RW-470\PLOTBASE\PROGRAM\PbDbRu.exe
[Comment: Path + name of the server program]

Name: SpoolDirectory
Type:STRING
Data: F:\\spool
[Comment: Spool directory]

Name: SpoolQuotas
Type:REG_DWORD
Data: 00000000
[Comment: % HDD capacity, limiting value, which new jobs can use if the SpoolDir local]

Name: Units
Type:REG_DWORD
Data: 00000001
[Comment: 0: all details in pixels,1: all details in mm, 2: all details in inches]

Name: UseFilePrint

Type:REG_DWORD
Data: 00000000
[Comment: FilePrint on/ off- if on, then plot to file]

Name: View
Type:STRING
Data: PLOTBASE - UI
[Comment: Name of the plot server controller]

Name: ViewOn
Type:REG_DWORD
Data: 00000001
[Comment: Fileview on/ off]

Name: DBOn
Type:REG_DWORD
Data: 00000001
[Comment: internal value for the start of the controller and the server]

Name: SslOn
Type:REG_DWORD
Data: 00000000
[Comment: Reader on/ off]

Name: SignalLightsOn
Type:REG_DWORD
Data: 00000000
[Comment: Signal lights on / off]

Name: ResponseOn
Type:REG_DWORD
Data: 00000000
[Comment: Response System on/ off]

Name: ResponseEMail
Type:REG_DWORD
Data: 00000000
[Comment: Response E-Mail on / off]

Name: ResponsePath
Type:STRING
Data: C:\SPOOL\response
[Comment: Path for Response file (uses RW-470 PLOTCLIENT WEB)]

Name: FilePrintDestination
Type:STRING
Data: f:\\fileprint
[Comment: if UseFilePrint = 1, directory, where the FilePrint is to be written to]

Name: Logging
Type:REG_DWORD
Data: 00000000
[Comment: 1: If logging switched on, 0: Logging switched off]

Name: LogLevel
Type:REG_DWORD
Data: 00000000
[Comment: If logging switched on: 1: error message, 2: Warnings, 3: Traces, 4: Reg/INI entries]

Key name: SOFTWARE\RW-470\PLOTBASE \PLOTSERVER\ 3.0\PlotEngine

Name: MaxWastepaper [0=Infinite -> XXX %]
Type:REG_DWORD
Data: 00000000
[Comment: max % paper area that can be wasted]

Name: PreferedPaperOrientation[PreferNone=0, PreferPortrait=1, PreferLandscape=2]
Type:REG_DWORD
Data: 00000000
[Comment: How the printout should be printed if possible]

Name: ClockWiseAutoRotate[FALSE=0,TRUE=1]

Type:REG_DWORD
Data: 00000000
[Comment: Direction of the drawing rotation, clockwise or anti-clockwise]

Name: SizeTolerance [mm]
Type:REG_DWORD
Data: 00000002
[Comment: If the printout is this value larger than the roll available, then nevertheless plotted]

Key name:SOFTWARE\ RW-470\PLOTBASE \ PLOTSERVER\ 3.0\PBWnd

These values give the colors of the jobs in the job list. The RGB colors are given in hexadecimal figures. The last six figures are used for this. Moving from right to left, the first two numbers stand for "R", the next two "G", then "B". Example: The color blue is printed off with the following hexadecimal number: 00ff0000

Name: ColorPending
Type:REG_DWORD
Data: 00000000
[Comment: Color for "Idle" status]

Name: ColorError
Type:REG_DWORD
Data: 000000c0
[Comment: Color for "Problem" status]

Name: ColorPlotting
Type:REG_DWORD
Data: 0000c000
[Comment: Color for "Printing" status]
Name: ColorOk
Type:REG_DWORD
Data: 00000000
[Comment: Color for "OK" status]

Name: ColorSecurityPlot
Type:REG_DWORD
Data: 00ff8000
[Comment: Color for “Password“ status]

Name: ColorTrialPrint
Type:REG_DWORD
Data: 00ff8000
[Comment: Color for “Test Print“ status]

Key name: SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\PBReader\Config\Registration

Name: ConfigCount
Type:REG_DWORD
Data: 00000002
[Comment: Number of spool paths]

Key name:SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\PBReader\Config\Registration\0

[Comment: settings for the first spool path]

Name: TypeName
Type: REG_SZ
Data: CFG - Interpreter
[Comment: Reference to the reader types]

Name: ConfigWindowName
Type: REG_SZ
Data: CFG
[Comment: Name of the input queue]

Name: ConfigParserPath
Type: REG_SZ
Data: F:\\SPOOL\\CFG
[Comment: Spool path]

Name: ConfigParserTime
Type:REG_DWORD
Data: 00001388h
[Comment: Timeout for the parser]

Name: ConfigReadyFile
Type:REG_DWORD
Data: 00000000
[Comment: Activate Ready File Action; 0: False, 1:True]

Name: ConfigParserOn
Type:REG_DWORD
Data: 00000001
[Comment: Activate reader; 0: False, 1:True]

Name: ConfigDefSSLFile
Type: REG_SZ
Data: default.ssl
[Comment: Name of the default SSL file]

Name: ConfigDefCFGFile
Type: REG_SZ
Data: default.cfg
[Comment: Name of the default CFG file]

Name: AccessValue
Type:REG_DWORD
Data: 01ffffffh
[Comment: Release of print parameters]

Key name:SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\PBReader\Config\Registration\1

[Comment: settings for a further spool path]

Name: TypeName
Type: REG_SZ
Data: SSL - Interpreter

[Comment: Reference to the reader types]

Name: ConfigWindowName
Type:REG_DWORD
Data: SSL
[Comment: Name of the input queue]

Name: ConfigParserPath
Type: REG_SZ
Data: F:\\SPOOL\\SSL
[Comment: Spool path]

Name: ConfigParserTime
Type:REG_DWORD
Data: 00001388h
[Comment: Timeout for the parser]

Name: ConfigReadyFile
Type:REG_DWORD
Data: 00000000
[Comment: Activate Ready File Action; 0: False, 1:True]

Name: ConfigParserOn
Type:REG_DWORD
Data: 00000001
[Comment: Activate reader; 0: False, 1:True]

Name: ConfigDefSSLFile
Type: REG_SZ
Data: default.ssl
[Comment: Name of the default SSL file]

Name: ConfigDefCFGFile
Type: REG_SZ
Data: default.cfg
[Comment: Name of the default CFG file, is not used]
Name: AccessValue
Type:REG_DWORD
Data: 01ffffffh
[Comment: Release of print parameters]

Key name: SOFTWARE\RW-470\PLOTBASE\ PLOTSERVER\3.0\ PBReader\Type\Registration

Name: ReaderCount
Type:REG_DWORD
Data: 00000002
[Comment: Number of reader types]

Key name: SOFTWARE\RW-470\PLOTBASE\ PLOTSERVER\3.0\ PBReader\Type\Registration\0

[Comment: settings for a reader type]

Name: TypeExePath
Type: REG_SZ
Data: C:\RW-470\PLOTBASE\PROGRAM\ReSslru.exe
[Comment:Path of the reader]

Name: TypeName
Type: REG_SZ
Data: SSL - Interpreter
[Comment: Name of the reader]

Name: TypeReadyFilePossible
Type:REG_DWORD
Data: 00000000
[Comment: Setting, whether the reader readyfiles are processed; 0:False, 1:True]

Name: TypeWithDefaultSsl
Type:REG_DWORD
Data: 00000001
[Comment: Setting, whether a default SSL is used; do not change]

Key name: SOFTWARE\RW-470\PLOTBASE\ PLOTSERVER\3.0\ PBReader\Type\Registration\1

[Comment: settings for a further type of reader]

Name: TypeExePath
Type: REG_SZ
Data: C:\RW-470\PLOTBASE\PROGRAM\ReCfgru.exe
[Comment: Reader path]

Name: TypeName
Type: REG_SZ
Data: CFG - Interpreter
[Comment: Reader name]

Name: TypeReadyFilePossible
Type:REG_DWORD
Data: 00000001
[Comment: Setting, whether the Reader ReadyFiles are processed; 0:False, 1:True]

Name: TypeWithDeaultSsl
Type:REG_DWORD
Data: 00000001
[Comment: Setting, whether a default SSL is used; do not change]

Key name: SOFTWARE\RW-470\PLOTBASE\ SCANTOOL\3.0\ Main

[Comment: settings for the RW-470 SCANTOOL]

Name: SslWorkPath
Type: REG_SZ
Data: F:\\work
[Comment: Path for the "Work" directory]

Name: PbPlotPath
Type: REG_SZ
Data: f:\SPOOL\ssl
[Comment:Path for the spool directory in RW-470 PLOTBASE]

Name: ScanBaseSystemPath
Type: REG_SZ

Data: C:\RW-470\PLOTBASE
[Comment:Path for RW-470 SCANTOOL]

Name: Path
Type: REG_SZ
Data: C:\RW-470\SCANTOOL\samples\
[Comment:last path used in the file selection]

Name: LastFilterRead
Type:REG_DWORD
Data: 00000001
[Comment: saves the file extension that was last used, do not change]

Name: ScannerDriver
Type: REG_SZ
Data: SelfD1Ru.dll
[Comment: File name of the scanner driver]

Name: SSLDefaultFile
Type: REG_SZ
Data: Default.SSL
[Comment:Name of the default SSL]

Name: MainWindow
Type:REG_DWORD
Data: 0,1,-32000,-32000,-1,-1,48,-3,638,461
[Comment: Size and position of the main window]

Name: FixedSize
Type:REG_DWORD
Data: 00000000
[Comment:Setting, whether the window is to be opened at maximum size; 0:False, 1:True]

Name: OnlyOneInstance
Type:REG_DWORD
Data: 00000001
[Comment: Setting, whether RW-470 SCANTOOL can be started more than once; 0:False, 1:True]

Name: ScanBaseTempPath
Type: REG_SZ
Data: C:\DOCUME~1\ADMINI~1\LOCALS~1\Temp\
[Comment:Path of the temporary directory for RW-470 SCANTOOL]

Name: EnableScanner
Type:REG_DWORD
Data: 00000001
[Comment: Switch the scan switch on, off; do not change]

Name: ViewBrightness
Type:REG_DWORD
Data: 000000ffh
[Comment: Save the brightness values in the file view]

Name: HpglCfgFile
Type: REG_SZ
Data: C:\RW-470\PLOTBASE\HPGL.HCF
[Comment:Path for the HPGL configuration file]

Name: CcpCfgFile
Type: REG_SZ
Data: C:\RW-470\PLOTBASE\CCP.CCF
[Comment: Path for the Calcomp configuration file]

Name: DeleteAfterSslPlot
Type:REG_DWORD
Data: 00000000
[Comment: Delete the SSL files; 0:Off, 1:On]

Name: Scan2File
Type:REG_DWORD
Data: 00000000
[Comment: Automatically save the file after scanning; 0:Off, 1:On]

Name: Scan2Set
Type:REG_DWORD

Data: 00000000
[Comment: Add scan result to the drawing set; 0:Off, 1:On]

Name: ScanToFilePath
Type: REG_SZ
Data: F:\\
[Comment: Path for ScantoFile files]

Name: ScanToFileName
Type: REG_SZ
Data: SBAUTO
[Comment:Name for ScanToFile file]

Name: ScanToFileStartNo
Type:REG_DWORD
Data: 0000002f
[Comment: Start number for ScanToFile file]

Name: ScanToFileDigits
Type:REG_DWORD
Data: 00000004
[Comment: Digits for the consecutive numbering]

Name: ScanToFileAutoStart
Type:REG_DWORD
Data: 00000000
[Comment: Automatic activation of the scan mode; 0:Off, 1:On]

Name: ScanToSaveRotation
Type:REG_DWORD
Data: 00000000
[Comment: Save the rotation setting for ScanToFile files; 0:Rotation by 0 degrees; 1:Rotation by 90 degrees, 2:Rotation by 180 degrees, 3:Rotation by 270 degrees]

Name: DisplayDialog
Type:REG_DWORD
Data: 00000001

[Comment: Activation of the “Scanner settings” window; 0:Off, 1:On]
Name: StampActive
Type:REG_DWORD
Data: 00000000
[Comment: Activation of the stamp function; 0:Off, 1:On]

Name: StampIFConfigName
Type: REG_SZ
Data: C:\RW-470\PLOTBASE\SCANTOOL
[Comment:Path and basic name of the stamp configurations]

Name: StampListConfigCnt
Type:REG_DWORD
Data: 00000000
[Comment: Number of stamps used; do not change]

Name: ScannerSettings
Type:REG_DWORD
Data: 1287732,2013061208,1333112,1412768,1333120, 1412776,35,366,310,733
[Comment: Position of the “Scanner Settings” window]

Name: ActiveOptionsPage
Type:REG_DWORD
Data: 00000001
[Comment: Save the tab selection in the “Options” dialog]

Name: LastFilterWrite
Type:REG_DWORD
Data: 00000000
[Comment: Last file type saved is automatically displayed when next file saved]

Name: LastCompression
Type:REG_DWORD
Data: 00000003
[Comment: Compression type of the last file saved, is automatically displayed when the next file is saved]

Key name:SOFTWARE\RW-470\PLOTBASE\ SCANTOOL\3.0\ Set

[Comment: settings for the character set]

Name: SSLEntryViewing
Type:REG_DWORD
Data: 00000001
[Comment: Display of the entries selected in the file view; 0:Off, 1:On]

Name: Ssl-Name
Type: REG_SZ
Data: SCANBASE.SSL
[Comment: File name of the last drawing set saved]

Key name:SOFTWARE\RW-470\PLOTBASE \ SCANTOOL\3.0\ Splitter\0

[Comment: Window division]

Name: DX
Type:REG_DWORD
Data: 000001e5
[Comment: horizontal window division]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS

Class name:<NO CLASS>
[Comment: File formats section]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\Calcomp

Name: CALC-SETTINGS
Type: REG_SZ
Data: DATA-STRUCT

[Comment: Only for internal management]

Name: CALCOMP_CONFIG_FILE
Type: REG_SZ
Data:
[Comment: This is the path for the Config File, where the basic settings for Calcomp are saved]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\HPGL / HPGL2

Name: HP-FONTPATH
Type: REG_SZ
Data:
[Comment: This is the path for the Ratio HPGL font files.]

Name: HPGL_CONFIG_FILE
Type: REG_SZ
Data:
[Comment: This is the path for the Config File where the basic settings for HPGL / HPGL2 are saved]

Name: HP-PLOTTERCOLORDEFAULT
Type: REG_SZ
Data: DATA-STRUCT
[Comment: Only for internal management]

Name: HP-PLOTTERMODE
Type: REG_SZ
Data: DATA-STRUCT
[Comment: Only for internal management]

Name: HP-PLOTTERPENDEFAULT
Type: REG_SZ
Data: DATA-STRUCT
[Comment: Only for internal management]

Name: HP-SETTINGS
Type: REG_SZ
Data: DATA-STRUCT
[Comment: Only for internal management]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\Intergraph

Name: TileDX
Type: REG DWORD
Data: This is where the tile width is when saving this format, there are no facilities in the application for adjusting this value.
[Comment: Default value 512]

Name: TileDY
Type: REG DWORD
Data: This is where the tile height is when saving this format, there are no facilities in the application for adjusting this value.
[Comment: Default value 512]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\TIFF

Name: TileDX
Type: REG DWORD
Data: This is where the tile width is when saving this format, there are no facilities in the application for adjusting this value.
[Comment: Default value 512]

Name: TileDY
Type: REG DWORD
Data: This is where the tile height is when saving this format, there are no facilities in the application for adjusting this value.
[Comment: Default value 512]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\Windows Metafile

Name: Default Dpi
Type: REG DWORD
Data: This is where the default Dpi is.
[Comment: Default value 400]

Name: Default Lpi
Type: REG DWORD
Data: This is where the default Lpi is.
[Comment: Default value 400]

Name: Default DX
Type: REG DWORD
Data: This is where the default image width is with which the WMF should be loaded.
[Comment: Default value 512]

Name: Default DY
Type: REG DWORD
Data: This is where the default image height is with which the WMF should be loaded.
[Comment: Default value 400]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\Portable Document Format (PDF)

Name: BasePath
Type: REG_SZ
Data: Basic path to the ghostscript files.
[Comment: Should always be set to ''." so that the ghostscript files can be correctly loaded]

Name: FontPath
Type: REG_SZ
Data: Path to the ghostscript font files.

[Comment: Default ".;.\Font"]

Name: IncludePath
Type: REG_SZ
Data: Additional path for font files
[Comment:]

Name: Device
Type: REG DWORD
Data: 0 No color channel
1 Red
2 Green
3 Blue
[Comment: Default 0, color channel for BiColorMode]

Name: EnableBiColor
Type: REG DWORD
Data: 0 BiColorMode switched on
1 BiColorMode switched off
[Comment: Is set internally]

Name: EnableLogging
Type: REG DWORD
Data: 0 for Logging switched off
1 for Logging switched on
[Comment: Default 0]

Name: HalfToneAccurateScreens
Type: REG DWORD
Data: 0 functionality switched off
1 functionality switched on
[Comment: Grayscale manipulation]

Name: HalfToneAngle
Type: REG DWORD
Data: 0 - 90
[Comment: Grayscale manipulation]

Name: HalfToneDefaultSelect
Type: REG DWORD

Data: ComboBox selection (0 - 4)
Additional entries possible
[Comment: Default 0]

Name: HalfToneFrequency
Type: REG DWORD
Data: 1 - 999
[Comment: Grayscale manipulation]

Name: HalfToneManual
Type: REG DWORD
Data: 0 Manual settings off
1 Manual settings on
[Comment: Grayscale manipulation]

Name: HalfToneMode
Type: REG DWORD
Data: 0 Background manipulation
1 General manipulation
2 Grayscale manipulation
[Comment: Grayscale manipulation]

Name: HalfToneSpotFunction
Type: REG DWORD
Data: ComboBox selection (0 - 22)
[Comment: Grayscale manipulation]

Name: HalfToneTransferFunction
Type: REG DWORD
Data: ComboBox selection (0 - 7)
[Comment: Grayscale manipulation]

Name: HalfToneWidthHeight
Type: REG DWORD
Data: 1 – 7 (Filter matrix dimension)
[Comment: Grayscale manipulation]

Name: PDFHalftoningUserDef
Type: REG_SZ
Data: DATA-STRUCT

[Comment:]

Name: PDFSettings
Type: REG_SZ
Data: DATA-STRUCT
[Comment:]

Name: UseHalftoning
Type: REG DWORD
Data: 0 Halftoning switched off
1 Halftoning switched on
[Comment: Default 0]

Name: UseScaling
Type: REG DWORD
Data: not used for PDF
[Comment: Default 1]

Key name:
SOFTWARE\RW-470\PLOTBASE\PLOTSERVER\3.0\FORMATS\RW-470PS / EPS

Name: BasePath
Type: REG_SZ
Data: Basic path to the ghostscript files.
[Comment: Should always be set to ''." so that the ghostscript files can be correctly loaded]

Name: FontPath
Type: REG_SZ
Data: Path to the ghostscript font files.
[Comment: Default ".;.\Font"]

Name: Additional font paths
Type: REG_SZ
Data: This entry is not used
Extra Registry entry(not under PDF or RW-470PS)
[Comment:]

Name: IncludePath
Type: REG_SZ
Data: Additional path for font files
[Comment:]

Name: Device
Type: REG DWORD
Data: 0 No color channel
1 Red
2 Green
3 Blue
[Comment: Default 0, Color channel for BiColorMode]

Name: EnableBiColor
Type: REG DWORD
Data: 0 BiColorMode switched on
1 BiColorMode switched off
[Comment: Is set internally]

Name: EnableLogging
Type: REG DWORD
Data: 0 for Logging switched off
1 for Logging switched on
[Comment: Default 0]

Name: HalfToneAccurateScreens
Type: REG DWORD
Data: 0 : functionality switched off
1 : functionality switched on
[Comment: Grayscale manipulation]

Name: HalfToneAngle
Type: REG DWORD
Data: 0 - 90
[Comment: Grayscale manipulation]

Name: HalfToneDefaultSelect
Type: REG DWORD
Data: ComboBox selection (0 - 4)
Additional entries possible

[Comment: Default 0]

Name: HalfToneFrequency
Type: REG DWORD
Data: 1 - 999
[Comment: Grayscale manipulation]

Name: HalfToneManual
Type: REG DWORD
Data: 0 Manual settings off
1 Manual settings on
[Comment: Grayscale manipulation]

Name: HalfToneMode
Type: REG DWORD
Data: 0 Background manipulation
1 General manipulation
2 Grayscale manipulation
[Comment: Grayscale manipulation]

Name: HalfToneSpotFunction
Type: REG DWORD
Data: ComboBox selection (0 - 22)
[Comment: Grayscale manipulation]

Name: HalfToneTransferFunction
Type: REG DWORD
Data: ComboBox selection (0 - 7)
[Comment: Grayscale manipulation]

Name: HalfToneWidthHeight
Type: REG DWORD
Data: 1 – 7 (Filter matrix dimension)
[Comment: Grayscale manipulation]

Name: TPSHalftoningUserDef
Type: REG_SZ
Data: DATA-STRUCT
[Comment:]

Name: RW-470PSSettings
Type: REG_SZ
Data: DATA-STRUCT
[Comment:]

Name: UseHalftoning
Type: REG DWORD
Data: 0 Halftoning switched off
1 Halftoning switched on
[Comment: Default 0]

Name: UseScaling
Type: REG DWORD
Data: 0 Scaling switched off
1 Scaling switched on
[Comment: Default 1, should usually be switched on. Only switch off in exceptional situations, if the PS file is not correctly scaled.]

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